

Abstract

The system and method of the present invention is to drive a slave axis (S_A) with a value which indicates to said slave axis that the guide axis (L_A) has already rotated further than is actually the case. This can be achieved by adding a correction angle (φ_{corr}) to the measured angle ($\varphi_{\text{L_meas}}$) of the guide axis. In order to configure the virtual onward rotation in such a way that a lag error of the slave axis is just compensated as a result, guide axis angles ($\varphi_{\text{L_meas}}$) are increased by respective correction angles (φ_{corr}) which are proportional to the angular velocity (ω_{L}) of the guide axis and weighted with the data propagation time (T_{T}) of the position measured value ($\varphi_{\text{L_meas}}$) of the guide axis and the delay (T_{R}) of the position control system of the slave axis, said correction angles (φ_{corr}) preferably being dimensioned in accordance with $\varphi_{\text{corr}} = \omega_{\text{L}} * (T_{\text{T}} + T_{\text{R}})$.